

1645

PATENT
Attorney Docket No. A-71339/RFT/TAL/NBC
Dorsey File No. 464334-142 #8

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

CHANG et al.

Serial No.: 10/098,514

Filing Date: March 11, 2002

For: *Plasmodium falciparum merozoite*
surface protein-1 produced in
transgenic plants

Examiner: UNKNOWN

Art Unit: 1645

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In satisfaction of the duty of disclosure under 37 C.F.R. § 1.56, and in accordance with the provisions of 37 C.F.R. §§ 1.97 and 1.98, Applicants wish to draw the attention of the U.S. Patent and Trademark Office to the reference cited on the accompanying substitute for form PTO-1449. Copies of references A3, C1-C6, C8, C10-C15, C17-C20, C29-C31, C33-C34, C36-C41, C43, C46, C51, C54, C57, C59, C62-C64, and C66-C67 are enclosed herewith. Since copies of all other references were provided either by Applicants or the Examiner in the following related U.S. Application - Serial No. 09/500,376, filed February 8, 2000 (pending) - of which the instant application is a continuation-in-part and upon which the instant application relies for its priority date, in accordance with 37 C.F.R. § 1.98(d), no copies of those references are enclosed.

Serial No.: 10/098,514
Filing Date: March 11, 2002

None of the foregoing references is believed to disclose the invention as claimed.
Nothing herein shall constitute an admission concerning the contents of any of the cited references, nor shall the inclusion of a reference herein be considered an admission that the reference constitutes prior art against the invention claimed in the above-identified application. Submission of the present document shall not be construed as an admission that a search has been made or that better art does not exist.

As far as is known to the undersigned, this Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits as set forth in 37 C.F.R. § 1.97(b), and therefore no fee is required. While no fee is currently believed to be due, if this belief is in error, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2319 (Our Order No. 464334-142 (A-71339/RFT/TAL/NBC)).

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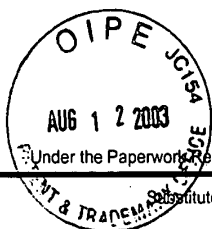
Respectfully submitted,
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for Todd A. Lorenz, Reg. No. 39,754
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				Application Number	10/098,514
				Filing Date	March 11, 2002
				First Named Inventor	CHANG, Sandra P.
				Group Art Unit	1645
				Examiner Name	
Sheet	1	of	4	Attorney Docket Number	A-71339/RFT/TAL/NBC (464334-142)

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	A1	4,745,051	05-1988	Smith et al.	
	A2	6,270,800 B1	08-07-2001	Speaker et al.	
	A3	6,420,523 B1	07-16-2002	Chang et al.	
	A4				
	A5				

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document Country Code ² Number ³ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	B1	EP 0 329 257	08-1989	MICROGENESYS, INC.	
	B2				
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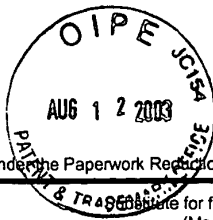
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	C1	ANNON. "Human Clinical Trials of Plant Engineered as Vaccine are Successful; May Usher in New Era for Plant/Pharmaceutical Research," Am. Soc. Plant Phys. Newsletter 25(3):9 (1998)			
	C2	BEVAN M., "Binary Agrobacterium vectors for plant transformation." Nucleic Acids Res. 1984 Nov 26;12(22):8711-21.			
	C3	BURGHHAUS PA, et al., "Immunization of Aotus nancymai with recombinant C terminus of Plasmodium falciparum merozoite surface protein 1 in liposomes and alum adjuvant does not induce protection against a challenge infection." Infect Immun. 1996 Sep;64(9):3614-9.			
	C4	CHANG SP, et al., "A carboxyl-terminal fragment of Plasmodium falciparum gp195 expressed by a recombinant baculovirus induces antibodies that completely inhibit parasite growth." J Immunol. 1992 Jul 15;149(2):548-55.			
	C5	CHANG SP, et al., "Generalized immunological recognition of the major merozoite surface antigen (gp195) of Plasmodium falciparum." Proc Natl Acad Sci U S A. 1989 Aug;86(16):6343-7.			
	C6	CHANG SP, et al., "A recombinant baculovirus 42-kilodalton C-terminal fragment of Plasmodium falciparum merozoite surface protein 1 protects Aotus monkeys against malaria." Infect Immun. 1996 Jan;64(1):253-61.			
	C7	CHEUNG et al. "Immunization with synthetic peptides of a Plasmodium falciparum surface antigen induces antimerozoite antibodies," Proc. Natl. Acad. Sci. USA 83:8328 (1986).			
	C8	DATLA, RSS, et al., "Improved high-level constitutive foreign gene expression in plants using an AMV RNA4 untranslated leader sequence," Plant Science 94(1/2):139 1993			

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	C9	ELLIS, R.W., "New Technologies for Making Vaccines," in Vaccines, Plotkin, S.A. and Mortimer, Jr. E.A., eds., W.B. Saunders Co., Philadelphia (1988), Ch. 29, pp. 568-575	
	C10	ESTRUCH, J.J. et al., "Transgenic plants: an emerging approach to pest control." Nat Biotechnol. 1997 Feb;15(2):137-41.	
	C11	FISHER, DE and Guiltinan, MJ, "Rapid, Efficient Production of Homozygous Transgenic Tobacco Plants with <i>Agrobacterium tumefaciens</i> : A Seed-to-Seed Protocol," Plant Mol. Biol. Reporter 13(3):278-289 (1995)	
	C12	FRALEY RT, et al., "Expression of bacterial genes in plant cells." Proc Natl Acad Sci U S A. 1983 Aug;80(15):4803-7.	
	C13	FROMM, H. et al., "An octopine synthase enhancer element directs tissue-specific expression and binds ASF-1, a factor from tobacco nuclear extracts." Plant Cell. 1989 Oct;1(10):977-84.	
	C14	GALLIE DR, et al., "The 5'-leader sequence of tobacco mosaic virus RNA enhances the expression of foreign gene transcripts in vitro and in vivo." Nucleic Acids Res. 1987 Apr 24;15(8):3257-73.	
	C15	GOMORD V, et al., "The C-terminal HDEL sequence is sufficient for retention of secretory proteins in the endoplasmic reticulum (ER) but promotes vacuolar targeting of proteins that escape the ER." Plant J. 1997 Feb;11(2):313-25.	
	C16	HALL et al. "Major surface antigen gene of a human malaria parasite cloned and expressed in bacteria," Nature 311:379 (1984).	
	C17	HASEGAWA A, et al., "The complete sequence of soybean chlorotic mottle virus DNA and the identification of a novel promoter." Nucleic Acids Res. 1989 Dec 11;17(23):9993-10013.	
	C18	HASELOFF J, et al., "Removal of a cryptic intron and subcellular localization of green fluorescent protein are required to mark transgenic Arabidopsis plants brightly." Proc Natl Acad Sci U S A. 1997 Mar 18;94(6):2122-7.	
	C19	HAQ TA, et al., "Oral immunization with a recombinant bacterial antigen produced in transgenic plants." Science. 1995 May 5;268(5211):714-6.	
	C20	HELLIWELL CA, and Gray JC. "The sequence surrounding the translation initiation codon of the pea plastocyanin gene increases translational efficiency of a reporter gene." Plant Mol Biol. 1995 Nov;29(3):621-6.	
	C21	HERRERA et al. "Conserved Polypeptides of Plasmodium Falciparum as Malaria Vaccine Candidates?", Acta Leidensia, 60(1):107-110 (1991).	
	C22	HERRERA et al. "Immunization of Aotus monkeys with Plasmodium falciparum blood-stage recombinant proteins," Proc. Natl. Acad. Sci. USA 87:4017 (1990).	
	C23	HOLDER et al. "Immunization against blood-stage rodent malaria using purified parasite antigens," Nature 294:361 (1981).	
	C24	HOLDER et al., "A hybrid gene to express protein epitopes from both sporozoite and merozoite surface antigens of Plasmodium falciparum," Parasitology, 97:373-382 (1988).	
	C25	HOLDER, A.A. et al., "Immunization against Plasmodium falciparum with recombinant polypeptides produced in Escherichia coli," Parasite Immunology, 10(6):607-617 (1988).	
	C26	HOLDER et al., "Primary Structure of the Precursor to the three major surface antigens of Plasmodium falciparum merozoite," Nature, 317:270-273 (1985).	
	C27	HOLDER et al., "Processing of the precursor to the major merozoite surface antigens of Plasmodium falciparum," Parasitology, 94:199-208 (1987).	
	C28	HUI et al. "Serum from Pf195 protected Aotus Monkeys Inhibit Plasmodium falciparum growth in Vitro," Exp. Parasitol. 64:519 (1987).	
	C29	IANNAcone, R. et al., "Specific sequence modifications of a cry3B endotoxin gene result in high levels of expression and insect resistance." Plant Mol Biol. 1997 Jun;34(3):485-96.	

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	C30	JOBLING SA, and GEHRKE L, "Enhanced translation of chimaeric messenger RNAs containing a plant viral untranslated leader sequence." Nature. 1987 Feb 12;325(6105):622-5.	
	C31	JOSHI RL, et al., "BSMV genome mediated expression of a foreign gene in dicot and monocot plant cells." EMBO J. 1990 Sep;9(9):2663-9.	
	C32	KNAPP, B. et al. "A histidin alanine rich recombinant antigen protects aotus monkeys from P. Falciparum infection," Behring Inst. Mitt. 82:349-59 (1988).	
	C33	KOZIEL MG, et al., "A cauliflower mosaic virus promoter directs expression of kanamycin resistance in morphogenic transformed plant cells." J Mol Appl Genet. 1984;2(6):549-62.	
	C34	KUMAR S, et al., "Immunogenicity and efficacy in aotus monkeys of four recombinant Plasmodium falciparum vaccines in multiple adjuvant formulations based on the 19-kilodalton C terminus of merozoite surface protein 1." Infect Immun. 2000 Apr;68(4):2215-23.	
	C35	LEW et al. "A protective monoclonal antibody recognizes a linear epitope in the precursor to the major merozoite antigens of Plasmodium chabaudi adami," Proc. Natl. Acad. Sci. USA 86:3768 (1989).	
	C36	LOCHER CP, et al., "Plasmodium falciparum: gp195 tripeptide repeat-specific monoclonal antibody inhibits parasite growth in vitro." Exp Parasitol. 1996 Oct;84(1):74-83.	
	C37	LUMBRERAS, V. et al., "The use of an alternative promoter in the Arabidopsis thaliana HMG1 gene generates an mRNA that encodes a novel 3-hydroxy-3-methylglutaryl coenzyme A reductase isoform with an extended N-terminal region." Plant J. 1995 Oct;8(4):541-9.	
	C38	MA JK, et al., "Generation and assembly of secretory antibodies in plants." Science. 1995 May 5;268(5211):716-9.	
	C39	MAITI IB, and Shepherd RJ. "Isolation and expression analysis of peanut chlorotic streak caulimovirus (PCSV) full-length transcript (FL) promoter in transgenic plants." Biochem Biophys Res Commun. 1998 Mar 17;244(2):440-4. Errata appears in Biochem Biophys Res Commun. 1998 Jul 9;248(1):210.	
	C40	MASON HS, et al., "Expression of hepatitis B surface antigen in transgenic plants." Proc Natl Acad Sci U S A. 1992 Dec 15;89(24):11745-9.	
	C41	MITRA A, et al., "A Chlorella virus gene promoter functions as a strong promoter both in plants and bacteria." Biochem Biophys Res Commun. 1994 Oct 14;204(1):187-94.	
	C42	MAJARIAN et al. "Passive Immunization against Murine Malaria with an IgG3 Monoclonal Antibody," J. Immunol. 132:3131 (1984).	
	C43	MOFFAT AS. "Exploring transgenic plants as a new vaccine source." Science. 1995 May 5;268(5211):658-660.	
	C44	MURPHY, V.F. et al., "Expression of hybrid malaria antigens in insect cells and their engineering for correct folding and secretion," Parasitology, 100 pt. 2:177-183 (1990).	
	C45	ODINK K.G. et al., "Expression of cloned cDNA for a major surface antigen of Plasmodium falciparum merozoite," FEBS Lett. (1984) 108-12.	
	C46	OHME-TAKAGI, M. et al., "The effect of sequences with high AU content on mRNA stability in tobacco." Proc Natl Acad Sci U S A. 1993 Dec 15;90(24):11811-5.	
	C47	PATARROYO et al. "A synthetic vaccine protects humans against challenge with asexual blood stages of Plasmodium falciparum malaria." Nature 332:158 (1988).	
	C48	PATARROYO et al. "Induction of protective immunity against experimental infection with malaria using synthetic peptides," Nature 328:629 (1987).	

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Sheet 4 of 4

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	C49	PATARROYO et al. "Protective Synthetic Peptides against Experimental Plasmodium falciparum-induced Malaria," Vaccines 87 (Brown, Chanock, Lerner, ed.) Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY. 117-124 (1987).	
	C50	PERRIN et al. "Antimalarial Immunity in Saimiri Monkeys," J. Exp. Med. 160:441 (1984).	
	C51	POTTER, RH and JONES, MGK, Plant Gene Transfer, in Plant and Molecular Biology, A Laboratory Manual, Clark, M. S. (ed.) Springer, chap. 8, pp. 400-426 (1997)	
	C52	RODRIGUEZ et al. "Studies In Owl Monkeys Leading to the Development of a Synthetic Vaccine Against the Asexual Blood Stages of Plasmodium Falciparum," Am. J. Trop. Med. Hyg. 43:339 (1990).	
	C53	RUEBUSH et al., "Immunization of Owl Monkeys with a Combination of Plasmodium Falciparum Asexual Blood-Stage Synthetic Peptide Antigens," Am. J. Trop. Med. Hyg. 43:355-366 (1990).	
	C54	SANGER M, et al., "Characteristics of a strong promoter from figwort mosaic virus: comparison with the analogous 35S Mar:14(3):433-43.	
	C55	SAUL et al., Second African Malaria Vaccine Testing Network Meeting, Accra, Ghana, Nov. 24-26, 1997	
	C56	SCHWARZ et al., "Structural Diversity of the Major Surface Antigen of Plasmodium falciparum Merozoites," Mol. Cell. Biol., 6(3):964-968 (1986).	
	C57	SHIRSAT, A. et al., "Sequences responsible for the tissue specific promoter activity of a pea legumin gene in tobacco," Mol Gen Genet. 1989 Jan;215(2):326-31.	
	C58	SIDDIQUI et al. "Merozoite surface coat precursor protein completely protects Aotus monkeys against Plasmodium falciparum malaria," 1987, Proc. Natl. Acad. Sci. USA 84:3014.	
	C59	SIJMONS PC, et al., "Production of correctly processed human serum albumin in transgenic plants." Biotechnology (N Y). 1990 Mar;8(3):217-21.	
	C60	SMILEK, D. et al., "A single amino acid change in myelin basic protein peptide confers the capacity to prevent rather than induce EAE," Proc. Natl. Acad. Sci. USA 88:9633-37 (1991).	
	C61	SOLTYSIK, "Structure/function studies of QS-21 adjuvant: assessment of triterpene aldehyde and glucuronic acid roles in adjuvant function," Vaccine 1995, 13(15):1403-1410	
	C62	STAUB, JM et al., "High-yield production of a human therapeutic protein in tobacco chloroplasts," Nat. Biotech. 18:333-338 (2000)	
	C63	STOWERS AW, et al., "A recombinant vaccine expressed in the milk of transgenic mice protects Aotus monkeys from a lethal challenge with Plasmodium falciparum." Proc Natl Acad Sci U S A. 2002 Jan 8;99(1):339-44. Epub 2001 Dec 18.	
	C64	STOWERS AW, et al., "Efficacy of two alternate vaccines based on Plasmodium falciparum merozoite surface protein 1 in an Aotus challenge trial." Infect Immun. 2001 Mar;69(3):1536-46.	
	C65	TANABE, K. et al., "Allelic Dimorphism in a Surface Antigen Gene of the Malaria Parasite Plasmodium falciparum," J. Mol. Biol., 195:273-287 (1987).	
	C66	TIAN, Y.C. et al., "Insect resistance of transgenic tobacco plants expressing delta-endotoxin gene of Bacillus thuringiensis." Chin J Biotechnol. 1991;7(1):1-13.	
	C67	TURPEN TH, et al., "Malarial epitopes expressed on the surface of recombinant tobacco mosaic virus." Biotechnology (N Y). 1995 Jan;13(1):53-7.	

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